AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Please replace the paragraph beginning on page 1, line 4, and ending on page 1, line 6, with:

The present invention is directed to waveguides or waveguide structures prepared from organic (co-)polymeric cyanates and poly(perfluorocyclobutanes) (PFCBs).

Please replace the paragraph beginning on page 2, line 20, and ending on page 2, line 30 with:

~~Poly(perfluorocyclobutanes)~~ PFCBs are a relatively new class of high performance polymers. They have first been described by Babb and others in US patents 5,037,917, 5,037,918, 5,037,919, and 5,159,038. Upon thermal curing they yield insoluble cross-linked polymers which are characterized by high thermal stability. Waveguides prepared from PFCBs in combination with buffer layers made of thermally grown $Si0_2$ have been described by Fischbeck et al., Electronic letters 33, 518 (1997). The layers prepared from PFCBs showed very low optical losses at 1550 nm (minimum: 0.2 dB/cm). Polymeric waveguide systems consisting of more than one organic polymer are not described in this paper.

Please replace the paragraph beginning on page 2, line 32, and ending on page 3, line 17, with:

In addition, it is known to use polycyanurates for the preparation of optical components. US patents 5,208,892 and 5,165,959 describe the preparation of polycyanate resins made of a single monomer (either fluorinated or non-fluorinated).

German Offenlegungsschrift DE 44 35 992 A1 described optical elements prepared from polycyanurate resins. The resins are made by polymerization of dicyanate or polycyanate compounds, optionally in mixture with di- or polyphenols or di- or polyglycidyl compounds. Like ~~poly(perfluorocyclobutanes)~~ PFCBs, polycyanurates yield insoluble cross-linked polymers upon thermal curing, and these polymers are as well characterized by high thermal stability. They are specifically useful due to their excellent adhesional force on a variety of substrates, for example silicon, silica or a variety of organic polymers. Refractive index and glass transition temperature of the cured cross-linked polymers may be varied in broad ranges, due to the easy availability of a great number of di- and mono-functional cyanate monomers which may be copolymerized with each other. Polycyanurates of the kind mentioned above are partly commercially available. Completely cured polycyanurates known in the art which consequently are stable for long terms may have optical losses of about 0.2 dB/cm at 1.3 μm. However the optical losses are not less than 0.5 dB/cm at 1.55 μm which is important in communication engineering technologies.